

In the Specification:

Amend the paragraph beginning at page 3, line 24 to read as follows:

It is a further advantage of the invention that the configurations of the domed transfer chamber lid convex to the chamber can decrease the volume of the transfer chamber. Decreased volume can decrease the manufacturing costs as well as decreasing microcontamination.

Amend the paragraph beginning at page 5, line 13 to read as follows:

It must be noted that as used herein and in the appended claims, the singular forms "a", "an", and "the" include plural referents unless the context clearly dictates otherwise. Thus, for example, reference to "a substrate" includes a plurality of such substrates and reference to "the metal" includes reference to one or more metals and equivalents thereof known to those skilled in the art, and so forth.

Amend the paragraph beginning at page 7, line 25 to read as follows:

In operation, the substrates to be processed in the system 100 are placed on the top of the pod loaders 116. Then a robot (not shown) begins removing the substrates, one at a time, out of the pod loaders and into one of the load lock chambers 108. After the substrates have been loaded into the load lock chamber 108, the pressure in the load lock chamber is reduced to match that in the transfer chamber 102. Then the door on the transfer chamber side is opened, and the transfer chamber robot (not shown) can begin servicing the load lock chamber 108. The transfer

chamber robot moves the substrates from the load lock chamber 108 to one of the process chambers 104 for processing, and afterwards moves the substrates back to one of the load lock chambers 108. When the load lock chamber 108 has received all of the processed substrates, the pressure in the load lock chamber is returned to that of the mini-environment, so the robot within the mini-environment can move the processed substrates back to a substrate pod 116.

Amend the paragraph beginning at page 11, line 3 to read as follows:

The structural features of the dome may be introduced during manufacturing, e.g., an "S" could be introduced by metal spinning during the fabrication of the spun domed lid. Structural features such as the "S" transition can also be introduced by methods such as roll forming either before or after the dome spinning.

Amend the paragraph beginning at page 12, line 3 to read as follows:

As it is critical to minimize contamination within the transfer chamber, the internal side of the domed lid is preferably cleaned following manufacturing (e.g., by sanding, finishing, electro-polishing, etc.) or, in the case it is desirable to use the lid for both convex and concave placement, sanding or finishing both sides of the dome. An exemplary electro-polishing process that may be used to finish the domed lid of the invention is described in U.S. Pat. No. 4,330,381. This processing step after manufacture of the lid removes contaminating particles that are undesirable in the sterile environment of the transfer

chamber of a vacuum processing system and can provide a smooth surface of the domed lid for ease of handling and use. Where only one placement of the lid is envisioned, the domed lid can be spun so that the finished surface is internal to the transfer chamber.

In the Claims:

Cancel without prejudice claims 16-20 which were previously withdrawn due to a restriction requirement.

Amend claims 1, 3, 14 and 15 to read as follows.

1. (Amended) A vacuum processing system, comprising:

a transfer chamber adapted to couple to at least one processing chamber and at least one load lock chamber and to house at least an end effector of a robot adapted to transport a substrate between the at least one processing chamber and the at least one load lock chamber; and

a lid mounted on the transfer chamber wherein the lid has a curved configuration such that an edge of the lid is sealed to an edge of the transfer chamber and the lid is curved such that a center of the lid gradually increases its distance both horizontally and vertically from the edge of the transfer chamber.

3. (Amended) The vacuum processing system of claim 1, wherein the lid has a concave configuration such that the lid center is vertically further from an inside area of the transfer chamber as compared to an edge of the lid.